

7-17-02 Clips

State mining fund tapped for project

**By Wally Kennedy
Globe Staff Writer**

WEBB CITY, Mo. — Spent fireworks and the tracks of bicycles can be seen on the chat piles north of Webb City.

Evidence of children at play gives Clint Bishop even more reason to finish the work at hand. His job is to close nine abandoned mine shafts that he says are death traps waiting to happen.

"I think people are vaguely aware of the existence of these shafts," Bishop said. "They are aware of the danger, but they forget about it. The contractor said he has seen kids on bicycles playing not far from where he is working.

"I'm just glad to see that they are being closed."

The shafts, often obscured by grass and weeds, are not marked or fenced. The shafts are 140 to 200 feet deep. Most are filled with water up to 40 feet or so below the surface.

"If the fall did not get you, you would certainly drown because there is no way to climb out," Bishop said.

Eileen Nichols, a Webb City resident and a member of the Jasper County Superfund Site Coalition, said: "From a parent's standpoint, watching your kids and keeping them safe is a full-time, 24-hour job.

"Hazards like that are tempting, and the danger really skyrockets. I am fearful for any family that is within walking distance of something as intriguing as a mine shaft. We are delighted to see them closed before one of them makes front-page news."

Yellow Dog and Hurry Up



Globe/T. Rob Brown

An inverted steel pyramid is lowered Tuesday into the opening of a mine shaft near Hawthorn Road, north of Webb City. A layer of concrete will be poured to seal the shaft.

The Missouri Department of Natural Resources and the Missouri Land Reclamation Commission have awarded an \$89,000 contract to Kennedy Contractors Inc. of Springfield to close the shafts, using a variety of techniques.

The project marks the first time that state abandoned-mine funds have been used at locations other than old coal mines. The department has been involved in the reclamation of coal mines since 1980.

The shafts, located on private property, remain from the days when the Oronogo-Duenweg Mining Belt was the world's leading producer of lead and zinc ores. The mines flourished from the 1870s to the 1920s, when rich veins of ore were discovered at Picher, Okla.

At that time, most of the mining rigs in the Missouri portion of the district were moved to the Picher area. The last significant production in Missouri ended in 1957. Because the fields were abandoned, the U.S. Bureau of Mines believes the mining belt still holds the largest single area of remaining ore reserves in the Tri-State Mining District.

Dan Stewart, a local geologist and expert on the mining district, said the mining was done by the room-and-pillar method.

"There were a lot of sheet-ground mines over there that were real productive, including the Yellow Dog, the Hurry Up and the Electrical," said Stewart, now 89. "Most of them went to the 200-foot level. It all stopped when the Picher Field opened about 1919 or 1920."

Ore bodies were worked from vertical and incline shafts that connected to one subterranean room. Over time, many of the mine workings became interconnected. Ore buckets connected to cables were used to raise ore, and to lower and raise men, machinery and supplies.

Bishop said he discovered a marker in the Yellow Dog shaft mine that showed the shaft was sunk in 1905. At one time, the Yellow Dog was the world's largest lead and zinc mine.

A 1983 survey by the U.S. Bureau of Mines documented more than 14,000 prospect and working shafts in the Tri-State District. Of those, 1,100 remained open, including 323 shafts in the Missouri portion of the district. Of those, 196 were in the Cartersville-Webb City area.

Though the shafts pose a threat to public health, their closing is not part of the U.S. Environmental Protection Agency's cleanup of the Jasper County Superfund site.

"When the EPA started here, we asked them about that," Nichols said. "They said right up front that the shafts were not something that they would address. I am sure glad somebody is."

EPA supports reclamation

Mark Doolan, the EPA's project manager for the Superfund site, said the shafts are considered physical hazards.

"The EPA does not deal with physical hazards. It only deals with chemical hazards," he said. "To go out and plug a shaft is not within our jurisdiction."

Doolan said the agency has closed some mines, particularly at Galena, Kan., to prevent surface water from entering the mines and causing ground-water contamination.

Doolan said the EPA supports the reclamation of the mined land north of Webb City for subdivisions.

"We have met with the developer, and we did a bunch of sampling for him," he said. "We showed him the contaminated areas that needed to be cleaned up. He has taken the chat away and brought in good topsoil for the yards."

The soil is meant as a shield for children who could be exposed to lead in the chat, a waste rock that was produced when the host rock was crushed to release the ore inside.

A plugging technique developed at mining sites in Western states is being used with some of the shafts, Bishop said. The technique uses foam to create a platform on which to pour concrete that is reinforced with steel rods.

A rope and harness are used to suspend a worker at the top of the shaft. He uses a hose to spray foam into the opening. The foam is similar to spray insulating foam that one can purchase at a hardware store.

Eventually, the foam hardens to create a platform on which the worker can walk. A 1-foot layer of concrete and steel is placed on top of the foam. After that hardens, a 3-foot layer of concrete and steel is placed on top of it. Each closed shaft will be identified by a marker.

Some of the shafts will be closed with inverted steel pyramids. Tons of concrete are poured into the pyramids to hold them in place. The design was first used by the U.S. Bureau of Mines in a demonstration project that closed 11 shafts at Galena, Kan., in the early 1980s.

"This would be cost-prohibitive for a private landowner," Bishop said.

The money for abandoned-mine projects come from fees collected from active coal mines by the U.S. Department of the Interior. The money is distributed to states that have problems stemming from coal mining that occurred before 1977.

The Interior Department's Office of Surface Mining and the Missouri Land Reclamation Commission authorized the use of abandoned-mine funds for the non-coal shafts in Jasper County.

The department has said future abandoned-mine land funds likely will be available to close additional shafts in the county.

Bishop said it is possible that five more shafts will be closed this fall in the area of the Range Line bypass, east of Joplin.
